

**SECURITIES AND EXCHANGE COMMISSION**  
**WASHINGTON, D. C. 20549**

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**FORM 11-K**

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**ANNUAL REPORT**

**Pursuant to Section 15(d) of the  
Securities Exchange Act of 1934**

**For the Fiscal Year Ended December 31, 2009**

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**PEPCO HOLDINGS, INC. RETIREMENT SAVINGS PLAN**  
(Full title of plan)

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**PEPCO HOLDINGS, INC.**  
(Name of issuer of securities held pursuant to the plan)

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**701 NINTH STREET, N.W.**  
**WASHINGTON, D. C. 20068**  
(Address of principal executive office)

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**Pepco Holdings, Inc. Retirement Savings Plan**  
**Financial Statements and Supplemental Schedules**  
**as of December 31, 2009 and 2008**  
**and for the Years Ended December 31, 2009 and 2008,**  
**and**  
**Report of Independent Registered Public Accounting Firm**

# **Pepco Holdings, Inc. Retirement Savings Plan**

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\* Other supplemental schedules required by 29 CFR 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 ("ERISA") have been omitted because they are not applicable.

## **REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Plan Administrator of the  
Pepco Holdings, Inc. Retirement Savings Plan:

We have audited the accompanying statements of net assets available for benefits of the Pepco Holdings, Inc. Retirement Savings Plan ("the Plan") as of December 31, 2009 and 2008, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Plan's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan at December 31, 2009 and 2008, and the changes in its net assets available for benefits for the years then ended, in conformity with U.S. generally accepted accounting principles.

Our audits were performed for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental Schedule H, line 4(i) – Schedule of Assets (Held at End of Year) as of December 31, 2009 and Schedule H, line 4(j) – Schedule of Reportable Transactions for the year ended December 31, 2009 are presented for purposes of additional analysis and are not a required part of the financial statements but are supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. These supplemental schedules are the responsibility of the Plan's management. The supplemental schedules have been subjected to the auditing procedures applied in our audits of the financial statements and, in our opinion, are fairly stated in all material respects in relation to the financial statements taken as a whole.

/s/ Mitchell & Titus LLP

Washington, DC  
June 25, 2010

**Pepco Holdings, Inc. Retirement Savings Plan**  
**Statements of Net Assets Available for Benefits**

	<u>As of December 31, 2009</u>	<u>As of December 31, 2008</u>
<b>Assets</b>		
Investments, at fair value		
Registered investment companies	\$494,907,790	\$388,765,809
Common/Collective trust	159,756,487	154,567,855
Pepco Holdings, Inc. common stock	100,675,415	95,399,523
U.S. Savings Bonds	—	463,448
Participant loans	<u>26,373,244</u>	<u>25,729,141</u>
Total investments	781,712,936	664,925,776
Receivables		
Employer contributions	23,446	20,679
Participant contributions	<u>7,648</u>	<u>—</u>
Net assets available for benefits, at fair value	781,744,030	664,946,455
Adjustments from fair value to contract value for fully benefit-responsive investment contracts	<u>(3,377,780)</u>	<u>2,051,716</u>
<b>Net assets available for benefits</b>	<u><u>\$778,366,250</u></u>	<u><u>\$666,998,171</u></u>

The accompanying Notes are an integral part of these financial statements.

**Pepco Holdings, Inc. Retirement Savings Plan**  
**Statements of Changes in Net Assets Available for Benefits**

	For the year ended December 31, 2009	For the year ended December 31, 2008
<b>Investment income (loss):</b>		
Interest and dividend income, investments	\$ 22,003,912	\$ 29,132,496
Interest income, participant loans	1,497,028	1,715,584
Net appreciation (depreciation) in fair value of investments	87,702,919	(264,841,896)
Net investment income (loss)	<u>111,203,859</u>	<u>(233,993,816)</u>
<b>Contributions:</b>		
Employer	11,824,737	11,728,705
Participants	34,126,697	34,672,920
Total Contributions	<u>45,951,434</u>	<u>46,401,625</u>
<b>Other Additions</b>	<u>30,085</u>	<u>94,618</u>
<b>Deductions</b>		
Payment of benefits to participants	45,555,213	56,483,637
Other deductions	262,086	242,452
Total deductions	<u>45,817,299</u>	<u>56,726,089</u>
<b>Net increase (decrease) before transfers from other plans</b>	111,368,079	(244,223,662)
Plan transfers	<u>—</u>	<u>1,550,933</u>
<b>Net increase (decrease) in net assets available for benefits</b>	111,368,079	(242,672,729)
Net assets available for benefits at beginning of year	<u>666,998,171</u>	<u>909,670,900</u>
<b>Net assets available for benefits at end of year</b>	<u>\$ 778,366,250</u>	<u>\$ 666,998,171</u>

The accompanying Notes are an integral part of these financial statements.

## **Pepco Holdings, Inc. Retirement Savings Plan**

### **Notes to Financial Statements For the Year Ended December 31, 2009**

#### **NOTE 1 – Description of Plan**

The following description of the Pepco Holdings, Inc. (“PHI” or the “Company”) Retirement Savings Plan (the “Plan”), provides only general information. Participants should refer to the Plan document for a more comprehensive description of the Plan’s provisions.

##### ***General***

The PHI Retirement Savings Plan is a defined contribution plan that consists of eight Sub Plans: 1) the Management Sub Plan, 2) the Local 1900 Sub Plan, 3) the Local 1307 Sub Plan, 4) the Local 1238 Sub Plan, 5) the Local 210 Sub Plan, 6) the Local 210-5 Sub Plan, 7) the PHI Operating Services Company (POSC) Sub Plan and, 8) the Petron Sub Plan. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (“ERISA”).

On April 20, 2010, the Board of Directors of PHI approved a plan for the disposition of Conectiv Energy Holdings Company (Conectiv Energy). The plan consists of the sale of Conectiv Energy’s wholesale power generation business and the liquidation of all of Conectiv Energy’s load service supply contracts, energy hedging portfolio, certain tolling agreements and other non-core assets. The targeted closing date for the sale is June 30, 2010. In addition, on December 7, 2009, PHI announced that it will wind down the retail electric and natural gas supply business, which it conducts through its subsidiary Pepco Energy Services. In connection with the operation of the retail energy supply business, collateral requirements, which are based on existing wholesale energy purchase and sale contracts and current market prices, will decrease as the contracts expire and are expected to be fully released over time by June 1, 2014. The remaining Energy Services business will not be affected by the wind down of the retail energy supply business. As further discussed below under the heading “Distributions and Withdrawals,” distributions for reasons of retirement or termination will be made upon receipt of written request. Accordingly, employees who separate from the company may leave their balances in the Plan until they decide to withdraw them.

##### ***Plan Amendments***

The PHI Administrative Board amended the Plan in June 2009 to allow for Roth 401k contributions and the amendment became effective April 1, 2010. Also in June 2009, the PHI Administrative Board amended the Plan to implement Auto Enrollment and Auto Escalation (subject to Union approval for the Plans serving union employees) and the amendment became effective in January 2010, for the Management Sub Plan, the POSC Sub Plan, the Petron Sub Plan, the Local 1900 Sub Plan, the Local 1238 Sub Plan, and the Local 1307 Sub Plan.

Also in 2009, the PHI Administrative Board approved amendments to 1) implement the Required Mandatory Distribution (RMD) as permitted by The Worker, Retiree, and Employer Recovery Act of 2008, 2) expand the definition of a hardship for the purpose of Hardship Withdrawals, as permitted by The Pension Protection Act of 2006, and 3) permit Qualified Reservists Distributions as permitted by The Heroes Earnings Assistance and Relief Tax Act of 2008.

Effective September 12, 2008, the PHI Administrative Board approved an amendment to add the Conectiv Energy Supply, Inc. (Petron) Safe Harbor 401(k) Profit Sharing Plan (Petron Sub Plan) to the PHI Plan. The Petron Sub Plan will follow the same rules as the Management Sub Plan with the exception of Company contributions. In the Petron Sub Plan, the Company contributes \$1 for every \$1 the participant contributes, up to the first 3% of base pay and \$.50 for every \$1 the participant contributes on the next 3% of base pay, however, eligible employees may also receive a discretionary contribution depending on the success of the respective company.

The Administrative Board of PHI amended the Plan to allow direct rollovers via a trustee-to-trustee transfer into Roth IRA’s from all sub plans effective January 1, 2008.

##### ***Designation of Trustee***

The Plan’s Trustee is Vanguard Fiduciary Trust Company (“Vanguard”) of Malvern, Pennsylvania. The Plan’s investments are held in a trust account at Vanguard and consist of a specific interest in the Pepco Retirement Savings Plan Master Trust (“the Trust”).

##### ***Designation of Recordkeeper***

The Vanguard Group serves as the Plan’s recordkeeper.

##### ***Participation***

Management employees (non-bargaining unit, full-time and part-time more than 20 hours per week) of PHI’s wholly-owned subsidiaries (PHI Service Company, Potomac Electric Power Company, Pepco Energy Services, Inc., Delmarva Power & Light

Company, Atlantic City Electric Company, Conectiv Atlantic Generation, LLC and Conectiv Delmarva Generation, LLC) are eligible to participate in the Management Sub Plan upon hire. Employees of PHI Operating Services Company participate in the POSC Sub Plan and are eligible to participate upon hire. Employees of Conectiv Energy Supply, Inc., participate in the Petron Sub Plan and are eligible to participate upon hire. Employees represented by Local 1900



**Pepco Holdings, Inc. Retirement Savings Plan**  
**Notes to Financial Statements—(Continued)**  
**For the Year Ended December 31, 2009**

**NOTE 1 – Description of Plan (continued)**

participate in the Local 1900 Sub Plan and are eligible to participate upon hire but are not eligible to receive company matching contributions until they reach one year of service (effective January 1, 2010, Local 1900 members will be eligible to receive company matching funds upon hire). Employees represented by Local 1238 participate in the Local 1238 Sub Plan and are eligible to participate once they have completed six months of service. Employees represented by Local 1307 participate in the Local 1307 Sub Plan and are eligible to participate once they have completed six months of service. Employees represented by Local 210 participate in the Local 210 Sub Plan and are eligible to participate on their date of hire if they are scheduled to work at least 1,000 hours of service in the first 12 consecutive month period. Employees represented by Local 210-5 participate in the Local 210-5 Sub Plan and are eligible to participate upon hire.

***Contributions***

In all Sub Plans, participants may contribute from 1% to 65% of their base pay on a before- or after-tax basis, not to exceed the maximum allowable under the Internal Revenue Code (“IRC”).

For participants in the Management Sub Plan and the Local 210-5 Sub Plan, the Company provides matching contributions in Company stock equal to 100% on the first 3% of base pay and 50% on the next 3% of base pay contributed by the employee. For participants in the POSC Sub Plan and the Petron Sub Plan the Company provides matching contributions in cash or company stock equal to 100% on the first 3% of base pay and 50% on the next 3% of base pay contributed by the employee. For participants in the Local 1238 Sub Plan and the Local 1307 Sub Plan, the Company provides matching contributions in Company stock equal to 50% up to 5% of the base pay contributed. For participants in the Local 1900 Sub Plan, the Company provided matching contributions in Company stock equal to 45% up to 6% of the base pay contributed, and effective June 1, 2008, the amount increased to 50% up to 6% of the base pay contributed. For participants in the Local 210 Sub Plan, the Company provides matching contributions in Company stock equal to 50% up to 6% of the base pay contributed.

The Company’s matching contributions, made in Company stock, are paid to the Trustee in authorized unissued shares or in cash for the purchase of Company common stock on the open market.

Participants age 50 and older (by year end) and meeting one of the IRS pre-tax contribution limits are eligible to make catch-up contributions. The catch-up contribution limits for 2009 and 2008 were \$5,500 and \$5,000, respectively.

The sum of the elected percentages of before- and after-tax contributions and the Company matching contributions may not exceed 65% of a participant’s annual salary. A participant is prohibited from making elective contributions to the Plan for six months following a hardship withdrawal. Eligible rollover contributions are permitted from other employer-sponsored plans into the Plan.

***Vesting***

Participants are 100% vested and have a nonforfeitable interest, in their own contributions, and in the Company matching contributions, including any earnings or losses thereon. However, participants in the Local 1900 Sub Plan are 100% vested in the Company’s matching contributions at the earlier of (1) the date on which a participant completes three years of service with the Company, (2) the date of a participant’s retirement, (3) the date of a participant’s death, (4) the date a participant begins a period of disability or, (5) the date a participant reaches age 65. Effective January 1, 2010, Local 1900 participants are eligible for immediate vesting.

The Plan allows participants to diversify their vested Company matching contributions regardless of age or years of participation in the Plan.

***Participant Accounts***

Each participant’s account is credited with the participant’s contribution, the Company’s matching contribution, and earnings (losses) attributable to the participant’s investments. Participant accounts are impacted by expenses

**Pepco Holdings, Inc. Retirement Savings Plan**  
**Notes to Financial Statements—(Continued)**  
**For the Year Ended December 31, 2009**

**NOTE 1 – Description of Plan (continued)**

charged by the funds in which they invest, as disclosed in the funds' prospectus. Also, certain funds charge redemption fees that are also paid directly by the participant from their account. All other administrative fees related to participant accounts are paid by the Company.

Participants may elect to have their contributions invested, in multiples of 1%, in one or more of the available investment options. The Plan's investment options were selected by the PHI Investment Committee and are intended to provide diversified categories of investments with different risk and return characteristics that will enable participants to create an investment portfolio to meet their individual goals, depending on the level of risk they are willing to accept. The investment options available to participants of the Plan are reviewed periodically and can be changed at the discretion of the PHI Investment Committee pursuant to the Plan Document.

Effective July 1, 1998, the U.S. Savings Bond Fund was closed to any new contributions to the fund. The U.S. Savings Bond Fund was terminated effective June 30, 2009. All of the monies in this fund were distributed to employees or transferred into another fund.

Participants can transfer all or part of their investment account balance and related earnings in any existing fund to any other fund option offered in the Plan with the exception of any limitation expressed in the prospectus of a specific investment fund that prohibits such transfer. Participants may change the allocation of their future contributions among the funds at any time.

***Distributions and Withdrawals***

If a participant retires, dies, becomes permanently disabled, or otherwise separates from the Company, the participant or participant's beneficiary is entitled to the entire account balance as valued on the withdrawal date. In the event of a participant's death, distribution of the participant's account balance will be made as soon as administratively practicable upon the receipt of appropriate documentation from the designated beneficiary. Distributions for reasons of retirement, disability retirement, permanent disability or termination will be made upon receipt of written request. Distributions of a participant's account balance may be made in (1) a lump sum cash payment, (2) in regular installments for a period not exceeding the joint and survivor life expectancy of the participant and his or her spouse or other beneficiary or, (3) partial lump sums upon the request of the participant, with certain limitations stated in the PHI Plan or Sub Plan document. Distributions from the Pepco Holdings, Inc. Common Stock Fund may be made in PHI common stock or cash based on the election of the participant. Distributions cannot be deferred beyond age 70 1/2.

While employed, upon written notice, a participant may make certain withdrawals of vested contributions. Pre-tax employee contributions can only be withdrawn for the reason of financial hardship, as defined in the Plan document. At the age of 59 1/2, the participant may withdraw any portion of his or her account balance.

After making a hardship withdrawal of pre-tax contributions, a participant is prohibited from making contributions or receiving Company matching contributions for a period of six months. A participant with less than 60 months of Plan participation will incur a six-month suspension period upon making any withdrawal of his or her after-tax contributions. During this suspension period, no matching contributions will be credited to the participant's account.

Distributions from the Pepco Holdings Stock Fund are made in shares of Company common stock unless the participant elects to receive cash. Distributions from the remaining investment funds are made in cash.

***Loans to Participants***

Loans are available to participants from amounts attributable to pre-tax and/or after-tax contributions, subject to U.S. Department of Labor and Internal Revenue Service (the "IRS") limitations. The Plan requires that a minimum of \$1,000 be borrowed by a participant. A one time fee per loan is deducted from the participant's account at the time of each loan distribution. The fee is \$50 for loans processed on the Vanguard website and \$100 for loans processed via a paper loan application. The number and amount of loans allowed to a participant are restricted by

**Pepco Holdings, Inc. Retirement Savings Plan**  
**Notes to Financial Statements—(Continued)**  
**For the Year Ended December 31, 2009**

**NOTE 1 – Description of Plan (continued)**

the PHI and Sub Plans and are consistent with IRS regulations. A participant can have up to four loans outstanding at any time with maximum term lengths of five years, or 30 years for a primary residence. The prevailing prime rate (quoted by Reuters at the end of the month prior to the month of the loan) is applied as the fixed interest rate for the loan. Loan repayments are made through payroll deductions or by prepayment in a lump sum. If an active participant has four outstanding loans and pays off one loan, they will not be eligible for another loan until 30 days after the loan pay-off date. Upon termination from the Company, a participant can elect to continue to make loan repayments. If the loan repayments are not made, the loan will be in default and is converted to a distribution at the end of the calendar quarter following the calendar quarter in which the first payment amount was missed, or approximately 90 days.

***Plan Administration and Termination***

The Plan is administered by the PHI Administrative Board, which is appointed by the Company's Chief Executive Officer. All contributions to the Plan are held in trust by Vanguard, the Plan Trustee, for the exclusive benefit of the participants. The Company generally pays the trustee fees and certain other administrative expenses of the Plan, while the participants pay expenses charged by the funds and disclosed in the Funds' prospectuses.

The Plan is a defined contribution plan. Interests in the Plan are not insured by the Company and are not guaranteed by the Pension Benefit Guaranty Corporation, an agency of the United States government.

Although the Company intends to continue the Plan indefinitely, it reserves the right to terminate or amend the Plan at any time. In the event of the termination of the Plan, all Company contributions become immediately vested to Plan participants.

**NOTE 2 - Significant Accounting Policies**

***Basis of Presentation***

The financial statements of the Plan are prepared on the accrual basis of accounting in conformity with United States generally accepted accounting principles.

***Use of Estimates***

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

***Valuation of Investments and Income Recognition***

The Plan provides for various investment options. Investment securities are exposed to various risks, such as interest, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the Statements of Net Assets Available for Benefits and Statements of Changes in Net Assets.

The Plan presents in the Statement of Changes in Net Assets Available for Benefits, the Plan's interest in the net investment income (loss) in the Trust, which consists of the realized gains or losses and the unrealized appreciation (depreciation) on those Trust investments.

The Plan's investments are stated at fair value using the framework established by Financial Accounting Standards Board (FASB) guidance on Fair Value Measurements and Disclosures (ASC 820). Purchases and sales of securities are recorded on a trade date basis.

**Pepco Holdings, Inc. Retirement Savings Plan**  
**Notes to Financial Statements—(Continued)**  
**For the Year Ended December 31, 2009**

**NOTE 2 - Significant Accounting Policies (continued)**

Dividends are recorded on the ex-dividend date. Interest on interest-bearing cash, money market accounts and participant loans is recorded when earned. Participants with investments in the Stock Fund have an option to receive a payout of any dividends paid on PHI stock held in the Stock Fund and allocated to units within the Stock Fund or reinvest those dividends to purchase additional units in the PHI Stock Fund.

***Participant Loans***

Loans to participants are valued at amortized cost, which approximates fair value.

***Benefit Payments***

Benefit payments to participants are recorded when paid.

***Forfeitures***

At December 31, 2009 and 2008, forfeited non-vested accounts totaled \$83 and \$3,692, respectively. These amounts were used to reduce future employer contributions or fund administrative expenses by the Plan.

***Plan Expenses***

Certain expenses incurred in the administration of the Plan are paid by the Company, excluding those expenses associated with participant accounts.

**NOTE 3 – Newly Adopted Accounting Standards**

***Fair Value Measurement and Disclosures (ASC 820)***

The Plan adopted new FASB guidance in the second quarter of 2009 for fair value measurement when markets are inactive and distressed. This guidance was effective for interim and annual periods ending after June 15, 2009. The guidance outlines a two-step test to identify inactive and distressed markets and provides a fair value application example for financial instruments when both conditions are met. Use of such information requires management to exercise judgment regarding how the market information is incorporated into the measurement of fair value. This guidance did not have a material impact on the Plan's net assets available for benefits or its changes in net assets available for benefits.

In September 2009, the FASB amended ASC 820 to allow entities to use net asset value (NAV) per share (or its equivalent), as a practical expedient, to measure fair value when the investment does not have a readily determinable fair value and the net asset value is calculated in a manner consistent with investment company accounting. The Plan adopted the guidance for the reporting period ended December 31, 2009 and has utilized the practical expedient to measure the fair value of investments within the scope of this guidance based on the investment's NAV. This guidance did not have a material effect on the Plan's net assets available for benefits or its changes in net assets available for benefits.

***FASB Accounting Standards Codification (ASC 105)***

The ASC identifies the sources of accounting principles and the framework for selecting the principles used in the preparation of nongovernmental financial statements presented under GAAP. In addition, it replaces the reference system for standards and guidance with a new numerical designation system known as the ASC. The ASC is the single source reference system for all authoritative GAAP.

The ASC is effective for financial statements issued for interim and annual periods ending after September 15, 2009. The Plan adopted the ASC guidance and referencing system for GAAP in its December 31, 2009 financial statements. Entities are not required to revise previous financial statements for the change in references to GAAP.

**Pepco Holdings, Inc. Retirement Savings Plan**  
**Notes to Financial Statements—(Continued)**  
**For the Year Ended December 31, 2009**

**NOTE 3 – Newly Adopted Accounting Standards (continued)**

The adoption of ASC did not result in a change in accounting principle for the Plan, therefore, it did not have a material impact on the Plan's net assets available for benefits or its changes in net assets available for benefits.

***Income Taxes (ASC 740)***

In September 2009, the FASB issued new guidance that clarifies a reporting entity must consider the tax positions of all entities regardless of the tax status of the reporting entity. The adoption of this guidance did not have a material impact on the Plan's financial statements.

***Subsequent Events (ASC 855)***

In May 2009, the FASB issued guidance related to subsequent events, to provide general standards of accounting for and disclosure of events that occur after the balance sheet date, but before financial statements are issued or are available to be issued. This guidance was amended in February 2010 and adopted by the Plan.

**NOTE 4 – Recently Issued Accounting Standards, Not Yet Adopted**

***Fair Value Measurement and Disclosures (ASC 820)***

The FASB issued new disclosure requirements for recurring and non-recurring fair value measurements. Some of the requirements will be effective for the Plan beginning with its December 31, 2010 financial statements and include: (i) a disaggregation of balance sheet categories that are measured at fair value into classes (i.e. subsets of assets or liabilities within a balance sheet line item), (ii) a description of pricing inputs and valuation methodologies for instruments with Level 2 and 3 valuation inputs, and (iii) a reconciliation of transfers of instruments between Level 1 and 2 valuation categories. Beginning with its December 31, 2011 financial statements, the Plan will be required to disaggregate the Level 3 fair value measurement reconciliations into separate categories for purchases, sales, issuances, and settlements. The Plan is evaluating the impact of this new guidance on its footnote disclosures.

**NOTE 5 – Fair Value Measurements**

FASB guidance on fair value measurement and disclosures (ASC 820) established a framework for measuring fair value and expanded disclosures about fair value measurements. As defined in the guidance, fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). PHI utilizes market data or assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. These inputs can be readily observable, market corroborated, or generally unobservable. Accordingly, PHI utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. The guidance establishes a fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurement) and the lowest priority to unobservable inputs (level 3 measurement). The three levels of the fair value hierarchy are as follows:

***Level 1***

Level 1 asset fair values are based on unadjusted quoted prices for identical assets in active markets that the Plan has the ability to access. Assets in this category include:

**Pepco Holdings, Inc. Retirement Savings Plan**  
**Notes to Financial Statements—(Continued)**  
**For the Year Ended December 31, 2009**

**NOTE 5 – Fair Value Measurements (continued)**

*Registered Investment Companies:* Quoted market prices are used to value the underlying investments while shares of mutual funds are valued based on the net asset value of shares held.

*Pepco Holdings, Inc. Common Stock:* Company common stock held in the Stock Fund is valued at the quoted market price at close of business as reported on the New York Stock Exchange. Participants' holdings in the Stock Fund are represented by units in the Stock Fund and do not represent direct ownership of PHI common shares, the value of which was \$7.30 per unit and \$7.69 per unit at December 31, 2009 and 2008, respectively, versus PHI common stock, which was valued at \$16.85 per share and \$17.76 per share at December 31, 2009 and 2008, respectively.

*U.S. Savings Bonds:* Valued at fair value based on quoted market prices.

**Level 2**

Level 2 asset fair values are based on quoted prices for similar assets in active markets, quoted prices for identical or similar assets in inactive markets, inputs other than quoted prices that are observable for the asset and, inputs that are derived principally from or corroborated by observable market data by correlation or other means. If the asset has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset. Assets in this category include:

*Common/Collective Trust:* These investments are public investment vehicles valued by discounting the related cash flows based on current yields to similar instruments with comparable durations considering the credit-worthiness of the issuer.

**Level 3**

Level 3 asset fair values are based on inputs that are unobservable and significant to the fair value measurement. Assets in this category include:

*Participant Loans:* Valued at amortized cost, which approximates fair value.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different measurement at the reporting date.

The asset's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

The following tables set forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2009 and 2008:

December 31, 2009	Level 1	Level 2	Level 3	Total
Registered investment companies	\$494,907,790	\$ —	\$ —	\$494,907,790
Common/Collective trust	—	159,756,487	—	159,756,487
Pepco Holdings, Inc. common stock	100,675,415	—	—	100,675,415
U.S. Savings Bonds	—	—	—	—
Participant loans	—	—	26,373,244	26,373,244
Total assets at fair value	<u>\$595,583,205</u>	<u>\$159,756,487</u>	<u>\$26,373,244</u>	<u>\$781,712,936</u>

**Pepco Holdings, Inc. Retirement Savings Plan**  
**Notes to Financial Statements—(Continued)**  
**For the Year Ended December 31, 2009**

**NOTE 5 – Fair Value Measurements (continued)**

December 31, 2008	Level 1	Level 2	Level 3	Total
Registered investment companies	\$388,765,809	\$ —	\$ —	\$388,765,809
Common/Collective trust	—	154,567,855	—	154,567,855
Pepco Holdings, Inc., common stock	95,399,523	—	—	95,399,523
U.S. Savings Bonds	463,448	—	—	463,448
Participant loans	—	—	25,729,141	25,729,141
Total assets at fair value	<u>\$484,628,780</u>	<u>\$154,567,855</u>	<u>\$25,729,141</u>	<u>\$664,925,776</u>

The tables below set forth a summary of changes in the fair value of the Plan's Level 3 assets for the year ended December 31, 2009 and 2008:

December 31, 2009	Participant loans
Balance, beginning of year	\$25,729,141
New loans issued, loans distributed and loan principal repayments, net	644,103
Balance, end of year	<u>\$26,373,244</u>

  

December 31, 2008	Participant loans
Balance, beginning of year	\$25,314,009
New loans issued, loans distributed and loan principal repayments, net	415,132
Balance, end of year	<u>\$25,729,141</u>

**NOTE 6 – Investment Contracts**

The Accounting Standards Codification (ASC) guidance requires investment contracts held by a defined-contribution plan to be reported at fair value. However, contract value is the relevant measurement attribute for that portion of the net assets available for benefits of a defined-contribution plan attributable to a fully benefit-responsive investment contract because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan.

The Plan invests in investment contracts through a Common/Collective trust (the Vanguard Retirement Savings Master Trust). The Statement of Net Assets Available for Benefits presents the fair value of the Vanguard Retirement Savings Master Trust and the adjustment from fair value to contract value. The fair value of the Plan's interest in the Vanguard Retirement Savings Master Trust is based on information reported by the issuer of the Common/Collective trust at year end. The contract value of the Vanguard Retirement Savings Master Trust represents contributions plus earnings, less participant withdrawals and administrative expenses.

**Pepco Holdings, Inc. Retirement Savings Plan**  
**Notes to Financial Statements—(Continued)**  
**For the Year Ended December 31, 2009**

**NOTE 7 – Non-participant-directed Investments**

Information about the components of and the significant changes in net assets relating to the Plan's non-participant-directed investments are as follows:

	<u>2009</u>	<u>2008</u>
<b>Pepco Holdings, Inc. Common Stock Fund:</b>		
Net Assets at Beginning of Year	\$ 95,399,523	\$157,014,038
Contributions	13,339,850	13,427,456
Interest and dividend income	6,092,984	5,666,911
Net depreciation in fair value of investments	(2,605,958)	(61,041,097)
Benefits paid to participants	(5,631,700)	(9,579,224)
Plan transfers	(6,778,070)	(10,523,507)
Other (includes loan activity)	858,786	434,946
Net Assets at End of Year	<u>\$100,675,415</u>	<u>\$ 95,399,523</u>

**NOTE 8 – Investments**

Investments at December 31, which exceed five percent of the Plan's net assets are as follows:

	<u>2009</u>	<u>2008</u>
Vanguard Institutional Index Fund	\$119,389,223	\$ 86,061,372
Vanguard Total Bond Market Index Investment	39,120,035	37,566,742
Vanguard Retirement Savings Trust	156,378,707	154,567,855
Pepco Holdings, Inc. Common Stock Fund	100,675,415	95,399,523

During the years ended December 31, 2009 and 2008, the Plan's investments (including gains and losses on investments bought, sold and transferred during the period) appreciated (depreciated) in value as follows:

	<u>2009</u>	<u>2008</u>
Registered Investment Companies - Mutual Funds	\$90,564,750	\$(203,800,800)
US Savings Bonds	(255,873)	—
Pepco Holdings, Inc. Common Stock Fund	(2,605,958)	(61,041,096)
Net appreciation (depreciation) in fair value of investments	<u>\$87,702,919</u>	<u>\$(264,841,896)</u>

**NOTE 9 – Related Party Transactions**

Certain Plan investments are shares of mutual funds managed by The Vanguard Group ("Vanguard"). Vanguard is affiliated with the Vanguard Fiduciary Trust Company who is the Plan's trustee as defined in the Plan and, therefore, these transactions qualify as party-in-interest transactions.

The Company as Plan sponsor is a related party. At December 31, 2009 and 2008, the Plan held investments of 5,974,802 shares and 5,371,595 shares of Pepco Holdings, Inc. common stock, respectively. These shares are indirectly held by participants through the ownership of 13,791,153 units and 12,405,660 units of the Pepco



**Pepco Holdings, Inc. Retirement Savings Plan**  
**Notes to Financial Statements—(Continued)**  
**For the Year Ended December 31, 2009**

**NOTE 9 – Related Party Transactions (continued)**

Holdings, Inc. Common Stock Fund at December 31, 2009 and 2008, respectively. The fair market value of the common stock at December 31, 2009 and 2008 was \$100,675,415 and \$95,399,523, respectively. Purchases of \$26,563,092 and \$27,039,495 and sales of \$18,680,851 and \$27,612,914 of Company common stock were made during 2009 and 2008, respectively.

**NOTE 10 – Tax Status of the Plan**

The IRS has determined that all plans that were merged into the Pepco Holdings, Inc. Retirement Savings Plan at January 13, 2006 (Conectiv Savings and Investment Plan – October 9, 2003; Atlantic Electric 401k Savings and Investment Plan B – October 9, 2003; Potomac Electric Power Company Savings Plan for Management Employees – December 1, 2003; PHI Operating Services Company 401k Savings Plan – August 7, 2001; and Potomac Electric Power Company Savings Plan for Bargaining Unit Employees – December 1, 2003; Conectiv Energy Supply, Inc. Safe Harbor 401(k) Profit Sharing Plan – August 7, 2001), the POSC Sub Plan – June 25, 2007, and the Petron Sub Plan – September 12, 2008 are qualified employee benefit plans under Section 401(a) of the Internal Revenue Code of 1986, as amended (the “Code”), and that the Trust is a qualified tax exempt employee benefit trust under Section 501(a) of the Code. Although the plans have been amended since receiving their determination letters, the Plan Administrator believes that the plans are designed and currently being operated in compliance with the applicable requirements of the Code. Participants are not taxed on the income allocated to contributions made for their account until such time as they or their beneficiaries receive distributions from the Plan.

**NOTE 11 – Risks and Uncertainties**

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants’ account balances and the amounts reported in the statement of net assets available for benefits.

**NOTE 12 – Reconciliation of Financial Statements to Form 5500**

The following is a reconciliation of net assets available for benefits per financial statements to the Form 5500 as of December 31:

	<u>2009</u>	<u>2008</u>
<b>Net Assets available for benefits:</b>		
Net assets available for benefits per financial statements at end of year	\$778,366,250	\$666,998,171
Adjustment from fair value to contract value for fully benefit- responsive investment contracts	3,377,780	(2,051,716)
Total participant loans deemed distributed	(607,025)	(555,611)
Net assets available for benefits per the Form 5500	<u>\$781,137,005</u>	<u>\$664,390,844</u>
	<u>2009</u>	<u>2008</u>
<b>Participants loans:</b>		
Participant loans per financial statements at end of year	\$ 26,373,244	\$ 25,729,141
Participant loans deemed distributed	(607,025)	(555,611)
Net participant loans per the Form 5500	<u>\$ 25,766,219</u>	<u>\$ 25,173,530</u>

**Pepco Holdings, Inc. Retirement Savings Plan**  
**Notes to Financial Statements—(Continued)**  
**For the Year Ended December 31, 2009**

**NOTE 12 – Reconciliation of Financial Statements to Form 5500 (continued)**

The following is a reconciliation of change in net assets for addition and benefits paid to participants per the financial statements to the Form 5500 as of December 31:

	<u>2009</u>	<u>2008</u>
<b>Benefit payment and provided benefits:</b>		
Payment of benefits to participants per financial statements at end of year	\$45,555,213	\$56,483,637
Participant loan repayments from prior years	(61,043)	(61,799)
Other (corrective distributions)	(34)	(405)
Net benefit payments per the Form 5500	<u>\$45,494,136</u>	<u>\$56,421,433</u>
	<u>2009</u>	<u>2008</u>
<b>Other additions:</b>		
Other income per financial statements at end of year	\$ 30,085	\$ 94,618
Deemed distribution adjustments	—	(46,867)
Miscellaneous adjustments	(275)	—
Net other additions per the Form 5500	<u>\$ 29,810</u>	<u>\$ 47,751</u>

**PEPCO HOLDINGS, INC. RETIREMENT SAVINGS PLAN**

**Schedule H - Line 4(i)  
Schedule of Assets (Held at End of Year)  
Year Ended December 31, 2009**

Pepco Holdings, Inc. Retirement Savings Plan, EIN 52-2297449, PN 017

Attachment to Form 5500, Schedule H, Line 4(i):

Identity of issue, borrower, lessor, or similar party	Description of investment including maturity date, rate of interest, collateral, par, or maturity value	Cost	Current value
Neuberger Soc Resp;Tr	Registered Investment Company	\$ 76,694	\$ 69,319
Allianz CCM Mid-Cap; Admn	Registered Investment Company	20,937,545	17,530,508
Allianz:NFJ SCV;Inst	Registered Investment Company	6,142,792	5,322,560
Baron Growth	Registered Investment Company	2,913,928	2,702,322
CRM Md Cp Val;Inv	Registered Investment Company	1,712,823	1,562,803
Columbia Small Cap Fd Class Z	Registered Investment Company	895,147	776,844
Conestoga Small Cap	Registered Investment Company	4,435,659	4,620,285
Dodge & Cox Intl Stock	Registered Investment Company	24,794,065	22,076,501
Fidelity Contrafund	Registered Investment Company	10,788,600	10,050,430
FT Mutual Discovery; A	Registered Investment Company	2,424,163	2,349,770
Lord Abbett Mid Cap Value Fund	Registered Investment Company	3,066,293	2,214,708
MFS Utilities Fund Cl A	Registered Investment Company	2,842,511	2,911,809
MSIFT Midcap Growth A	Registered Investment Company	3,163,330	3,269,267
MSIF US Real Estate Class I	Registered Investment Company	3,805,046	2,632,928
N&B Genesis Trust	Registered Investment Company	4,586,676	3,967,503
Oakmark Eqty & Inc;I	Registered Investment Company	5,311,735	5,419,944
PIMCO Total Return Fd, Admin	Registered Investment Company	25,146,165	25,334,827
T. Rowe Price Emerging Mkt St	Registered Investment Company	13,733,187	14,117,058
T. Rowe Price New Horizons Ret	Registered Investment Company	833,398	776,164
TRP Growth Stock Fund	Registered Investment Company	29,126,020	28,024,749
TRP Spectrum Growth	Registered Investment Company	4,063,835	3,634,026
TRP Spectrum Income Fund	Registered Investment Company	3,974,030	3,970,990
Templeton Inc:GB;A	Registered Investment Company	6,743,362	7,352,619
* Vanguard Explorer Fund Inv	Registered Investment Company	1,752,752	1,721,668
* Vanguard GNMA Investor Shares	Registered Investment Company	16,070,898	16,239,494
* Vanguard Inst Index Fund	Registered Investment Company	131,740,638	119,389,223
* Vanguard IT Treasury Inv	Registered Investment Company	6,689,933	6,450,969
* Vanguard PRIMECAP Fund Inv	Registered Investment Company	30,169,209	28,677,716
* Vanguard Prime Money Mkt	Registered Investment Company	229,956	229,956
* Vanguard Tgt Retirement 2005	Registered Investment Company	1,904,914	1,847,470
* Vanguard Tgt Retirement 2010	Registered Investment Company	3,765,382	3,625,563
* Vanguard Tgt Retirement 2015	Registered Investment Company	16,595,947	16,108,520
* Vanguard Tgt Retirement 2020	Registered Investment Company	4,008,906	3,953,245
* Vanguard Tgt Retirement 2025	Registered Investment Company	15,975,182	15,201,096
* Vanguard Tgt Retirement 2030	Registered Investment Company	1,283,889	1,300,576
* Vanguard Tgt Retirement 2035	Registered Investment Company	6,190,447	5,946,018
* Vanguard Tgt Retirement 2040	Registered Investment Company	806,546	826,058
* Vanguard Tgt Retirement 2045	Registered Investment Company	7,147,997	6,739,303
* Vanguard Tgt Retirement 2050	Registered Investment Company	402,294	422,374
* Vanguard Target Retirement Inc	Registered Investment Company	3,224,750	3,223,690
* Vanguard Total Bd Mkt Indx Inv	Registered Investment Company	38,089,186	39,120,035
* Vanguard Total Int'l Stock Idx	Registered Investment Company	29,069,654	26,585,871
* Vanguard Windsor II Fund Inv	Registered Investment Company	32,550,181	26,611,011
* Vanguard Retirement Savings Trust**	Common/Collective Trust	159,756,487	159,756,487

\* Party in interest

\*\* Fair value

**PEPCO HOLDINGS, INC. RETIREMENT SAVINGS PLAN**

**Schedule H - Line 4(i) (continued)**  
**Schedule of Assets (Held at End of Year)**  
**Year Ended December 31, 2009**

Pepco Holdings, Inc. Retirement Savings Plan, EIN 52-2297449, PN 017

Attachment to Form 5500, Schedule H, Line 4(i) (continued):

Identity of issue, borrower, lessor, or similar party		Description of investment including maturity date, rate of interest, collateral, par, or maturity value	Cost	Current value
*	Pepco Holdings, Inc. Common Stock Fund	Company Stock Fund	118,355,315	100,675,415
	Loan Fund	3.25% - 11%	—	26,373,244
Total			<u>\$807,297,467</u>	<u>\$781,712,936</u>

\* Party in interest

**PEPCO HOLDINGS, INC. RETIREMENT SAVINGS PLAN**

**Schedule H - Line 4(j)  
Schedule of Reportable Transactions  
Year Ended December 31, 2009**

Pepco Holdings, Inc. Retirement Savings Plan, EIN 52-2297449, PN 017

Attachment to Form 5500, Schedule H, Line 4(j):

<u>Identity of Party Involved</u>	<u>Description of Asset</u>	<u>Purchase Price</u>	<u>Selling Price</u>	<u>Historical Cost of Asset</u>	<u>Current Value of Asset on Transaction Date</u>	<u>Historical Gain (Loss)</u>
Vanguard	Pepco Holdings Common Stock Fd	\$26,563,092	\$ —	\$ —	\$26,563,092	\$ —
Vanguard	Pepco Holdings Common Stock Fd	—	18,680,851	24,747,966	18,680,851	(6,067,115)

**PEPCO HOLDINGS, INC. RETIREMENT SAVINGS PLAN**

**Exhibits:**

Exhibit 23 Consent of Independent Registered Public Accounting Firm

**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Administrative Board has duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized.

**PEPCO HOLDINGS, INC. RETIREMENT  
SAVINGS PLAN**

By:                     /s/ JOSEPH M. RIGBY                      
**Joseph M. Rigby,**  
**Chairman Administrative Board**

Date: June 25, 2010

**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the Registration Statement (Form S-8 No.333-131371) pertaining to Pepco Holdings, Inc. Retirement Savings Plan of our report dated June 25, 2010, with respect to the financial statements and supplemental schedules of the Pepco Holdings Inc. Retirement Savings Plan included in this Annual Report (Form 11-K) for the year ended December 31, 2009.

/s/ Mitchell & Titus LLP

Washington, DC  
June 25, 2010